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ABSTRACT

This study measured the effectiveness of teacher education programs in modifying cross-cultural attitudes through Osgood's Semantic Differential (SD) techniques, coupled with factor and pattern similarity analyses. The five concepts rated were desegregation, discipline, instructional technique, professionalism, and students. Subjects were 51 black and 76 white teachers from Alabama who volunteered to attend the Summer Institute of the University of South Alabama School Desegregation Center. The teachers were administered tests on the first and last days of the Institute and a follow-up test 6 weeks later. The research substantiated the effectiveness of SD techniques in describing the factors of subjects' attitudes toward topics on desegregation. Data revealed that fundamental differences in attitudes remained across racial groups and after the experiment was completed. Male and female groupings indicated a divergence into dissimilar response patterns. Different modes or intensities of treatment seem to be indicated. Ten references are included together with four tables of data. (BRB)

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ABSTRACT

This research substantiates the effectiveness of SD techniques, coupled with factor and pattern similarity analyses, in describing the unique, multiple factors of Ss attitudes toward topics related to school desegregation. It revealed that fundamental differences remained in Ss attitudes toward the concepts studied, especially across racial groups and after experimental treatment. Analysis of data by male/female groupings indicated that attitudes over the treatment period also tended to diverge to increasingly dissimilar patterns of response. Different modes or intensities of treatment seem to be indicated if attitudinal parity is desired across racial groups.

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A BI-RACIAL COMPARISON OF TEACHER ATTITUDES TOWARD TOPICS RELATED TO SCHOOL DESEGREGATION

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The present study measured the effectiveness of teacher education programs in modifying cross-cultural attitudes through Semantic Differential (SD) techniques, coupled with factor and pattern similarity analyses.

As a result of recent court-ordered school district reorganization, much information has been gathered in attempting to understand teacher attitudes toward a variety of concepts related to school desegregation. The effect of federal programs designed to liberalize cross-cultural attitudes have been under investigation (Faulk, 1972). Also under study (Rafky, 1972) are ancillary problems to school desegregation, such as the difficulties of black professors in traditionally white northern college and university campuses due to discrimination and status dilemma. Research studies (Craig and Henry, 1971) on teachers completing their first year in a newly integrated situation verified that because the number of expected inter-racial problems far exceeded the number of actual experiences, there was a resulting shift of attitudinal bias. Kinnick and Plattor (1967) have attempted to document the decrease of ethnocentric tendencies of teachers after treatment. Using Adorno's F and E Scales and a Desegregation scale, the experimental group, when compared to the control group, expressed significantly greater tolerance and acceptance of Negroes and desegregation practices and exhibited less authoritarian and ethnocentric tendencies.

According to the results of a teacher questionnaire (Purl, 1970), teachers who did not favor integration for Mexican-American children seem not to have any different experiences with these children than those teachers who did favor integration. In the same study, Osgood's semantic differential (Osgood, Suci, Tannenbaum, 1957) revealed that teachers see parents from varied ethnic backgrounds differently. The differential used for this analysis consists of 18 bi-polar items designed to tap teachers' perceptions of different ethnic parent groups.

Because factor analysis has consistently yielded a prime evaluative factor (Kane, 1969), semantic differential techniques have been utilized extensively in recent years for cross-cultural attitude research. Using SD techniques, studies have been conducted on the effect of dialect upon attitudes of college students (Buck, 1968), school-related attitudes of culturally disadvantaged elementary school children (Neale and Proshek, 1967), cross-cultural communication (Oetting, 1964), and the attitudes of superintendents and teachers in majority Negro school districts in the South.

This study extends the data available on cross-cultural attitude research using SD techniques and adds a further dimension to SD research through the use of pattern similarity analysis of SD profiles of selected sub-population groupings.

METHODS

Subjects:

Ss were 127 teachers, (51 black, 76 white, 94 female, and 33 male), from throughout the State of Alabama who voluntarily attended the Summer Institute of the University of South Alabama School Desegregation Center.

Apparatus:

To assess Ss attitudinal changes, Osgood's Semantic Differential Technique was used. The instrument consisted of five (5) concept words, (Desegregation, Discipline, Instructional Technique, Professionalism, Students), which were rated on 15 bi-polar adjective scales.

Factor analysis of SD data was accomplished using a correlation of variables based on standard deviation followed by principal components analysis through orthogonal rotation, and then concluded when the Varimax criterion was satisfied. Pattern similarity was accomplished using Cattell's Index of Pattern Similarity (1949), using each paired response item as a profile component.

Procedures:

Experimental treatment consisted of a Summer Institute curriculum concentrating on humanizing the educational process. The institute was modularly scheduled and included seven (7) components ranging from one (1) to three (3) weeks in length and offered one or more times during a nine (9)-week period. The mean length of institute attendance for the Ss was three (3) weeks.

Ss were administered a pre-test on the first day of their institute component, a post-test on their last day in their last component, and a follow-up test six weeks after the opening of school.

RESULTS

Since the first three (3) factors accounted for 0.574 - 0.696 of the total variance, it was decided to assume the first three (3) factors as principal descriptors of Ss attitudes.

Insert Table 1 about here

As noted in Table 1, evaluation appeared as the prime factor for each concept word except "Discipline." Secondary and tertiary factors were not as consistent across concepts.

Insert Table 2 about here

In general, attitude measures fluctuated around a stable base point across the two time-intervals between testings (cf. Table 2). Attitudes concerning "Discipline" and "Professionalism" remained unchanged; however, attitudes concerning the concept "Students" changed radically throughout each interval. A significant change in response pattern was noted for the concept "Desegregation."

The following indices of response pattern similarity are recorded in Table 3 for all significant relations across and within racial groups at three (3) testings.

Insert Table 3 about here

As evidenced by Table 3, intra-group data on the concept "Desegregation" has shown that black Ss indicated a similar response pattern at each testing interval; whereas, white Ss changed the response pattern markedly after treatment, but returned to their pre-treatment response pattern after school/classroom experiences.

Intra-group analysis of the concept "Discipline" has shown that black Ss indicated only slight modification of responses over each interval, but across the entire period of testing, modification of response pattern was evidenced; white Ss indicated no changes toward this concept.

Whereas black Ss changed their attitudes about the concept "Professionalism" in the interval following treatment, follow-up response pattern remained closely aligned to that indicated at pre-testing; white Ss registered insignificant changes of attitude resulting from treatment, but significant modifications of response pattern were recorded after school/classroom experiences.

Attitudes toward the concept "Students" among black Ss changed considerably over the two intervals between testings; white Ss also indicated a similar attitudinal shift.

Toward the concept "Instructional Technique," black Ss indicated an increasingly different response pattern over the two intervals between testing; white Ss also indicated a similar attitudinal shift.

In the vast majority of cases when comparing response patterns across racial groups, black Ss indicated significantly different response pattern than white Ss at each time of testing for each concept word studied.

Table 4 lists the indices of pattern similarity for male/female sub-groupings.

Insert Table 4 about here

In reference to Table 4, males tended toward more marked attitudinal change after treatment than females, but females indicated more significant attitudinal change over the longer time period between pre-testing and follow-up testing than males. In comparing inter-group data, it was observed that male and female response patterns tended to diverge at each subsequent testing.

DISCUSSION

In this study, it is false to assume that evaluation is the primary component of Ss attitude toward every concept word. It may be necessary then, that behavioral specimens collected on a semantic differential, as well as other attitude research data, must first be analyzed to define the unique factors which determine Ss' attitudes, and in turn, Ss' behavioral responses. Much attitude assessment proposes to measure evaluative behaviors of Ss, whereas for certain concepts and certain populations under study, the primary attitudinal viewpoint may not necessarily be evaluation. The factor structure for the concept "Discipline" in this study lends support to this caution.

Further, evaluation is seldom the only factor in attitudes. In previous research (Osgood, et. al. 1957; Kane, 1969), SD data has rather consistently yielded three factors generally identified as evaluation, potency, and activity. A measurement of attitude change cannot, therefore, rely on a uni-dimensional analysis of evaluative behaviors alone. Following the identification of factors, as suggested above, the researcher may construct a more meaningful model of Ss' attitudes by measuring not only the change in intensity of behavioral specimens, but also the changing pattern of responses across factors. This method respects the multi-dimensionality of activities.

At every testing, the pattern of responses differed significantly between racial groups, which seems to indicate that attitudinal factors

differed either in kind or intensity between races. This phenomenon did not occur in the pattern of responses between males and female groupings of the same Ss.

In summary, this research substantitates the effectiveness of SD techniques, coupled with factor and pattern similarity analyses, in describing the unique, multiple factors of Ss attitudes toward topics related to school desegregation. It revealed that fundamental differences remained in Ss attitudes toward the concepts studied, especially across racial groups and after experimental treatment. Analysis of data by male/female groupings indicated that attitudes over the treatment period also tended to diverge to increasingly dissimilar patterns of response. Different modes or intensities of treatment seem to be indicated if attitudinal parity is desired across racial groups.

REFERENCES

Buck, T. F. Effects of Negro and White dialectical variations upon attitudes of college students. Speech Monthly, 1968, 35: 181-6.

Craig, M. and Henry, B. Teachers' fears and problems in newly integrated schools. Phi Delta Kappan, 1971, 52: 546-7.

Faulk, H. R. Desegregation in McKeesport. Integrated Education, 1972, 10: 35-38.

Kane, R. Semantic differential factor structure with concepts and subjects from education. Journal of Experimental Education, 1969, 37: 34-7.

Kinnick, B. C. and Plattor, S. D. Attitudinal change toward Negroes and school desegregation among participants in a summer training institute. Journal of Social Psychology, 1967, 73(2): 271-283.

Neale, D. C. and Proshek, J. M. School related attitudes of culturally disadvantaged elementary school children. Journal of Educational Psychology, 1967, 58(4): 238-244.

Oetting, E. R. Cross cultural communication and the semantic differential. Journal of Counselling Psychology, 1964, 11: 292-3.

Osgood, C. and Suci, G. and Tannenbaum, P. The measurement of meaning. University of Illinois Press, 1957, 342 pp.

Purl, M. C. The Riverside School Integration Study: Introduction, Period Survey, and Teacher Questionnaire. Riverside City Schools, 1970.

Rafky, D. M. Wit and racial conflict among colleagues. Integrated Education, 1972, 10: 38-43.

TABLE 1

FACTOR IDENTIFIERS FOR THE PRINCIPAL FACTORS

OF FIVE CONCEPT WORDS STUDIED

Concept Word	Factor One	Factor Two	Factor Three
Instructional Technique	Evaluation	Stability	Complexity
Professionalism	Evaluation	Competition	Complexity
Desegregation	Evaluation	Potency	Activity
Discipline	Competition	Evaluation	Evaluation
Students	Evaluation/ Activity	Stability/ Objectivity	Complexity

* Based on paradigm semantic pairs as researched by Osgood, et. al.

TABLE 2

INDICES OF PATTERN SIMILARITY

FOR TOTAL POPULATION

Concept Word	Inter-Group Indices*		
	1,2	2,3	1,3
Desegregation	>.10	>.10	0.01
Discipline	>.10	>.10	>.10
Professionalism	>.10	>.10	>.10
Students	0.01	0.01	0.01
Instructional Technique	>.10	0.10	>.10

* 1. Pre-testing

2. Post-testing

3. Follow-up testing

TABLE 3

INDICES OF PATTERN SIMILARITY

BY BLACK/WHITE SUB-GROUPINGS AT THREE TESTINGS

Concept Word	Intra-Group Indices *						Inter-Group Indices *		
	1,3	3,5	1,5	2.4	4,6	2,6	1,2	3,4	5,6
Desegregation	>.10	>.10	>.10	>.10	0.10	>.10	0.01	0.01	0.01
Discipline	>.10	>.10	0.01	>.10	>.10	>.10	0.01	0.01	0.02
Professionalism	>.10	0.02	>.10	>.10	0.02	0.05	0.01	0.01	0.01
Students	0.10	0.01	0.01	>.10	>.10	0.02	0.01	0.01	0.01
Instructional Technique	>.10	>.10	0.01	0.05	>.10	0.05	0.10	0.01	0.01

* 1. Black Pre-test

2. White Pre-test

3. Black Post-test

4. White Post-test

5. Black Follow-up

6. White Follow-up

TABLE 4

INDICES OF PATTERN SIMILARITY

BY MALE/FEMALE SUB-GROUPINGS AT THREE TESTINGS

	Intra-Group Indices *						Inter-Group Indices *		
Concept Word	1,3	3,5	1,5	2,4	4,6	2,6	1,2	3,4	5,6
Desegregation	>.10	>.10	0.05	>.10	>.10	0.10	>.10	>.10	0.01
Discipline	>.10	0.05	0.10	0.01	>.10	0.01	>.10	>.10	0.01
Professionalism	>.10	0.01	0.01	>.10	>.10	0.01	>.10	0.01	>.10
Students	>.10	0.01	>.10	0.01	0.01	0.02	>.10	0.01	0.05
Instructional Technique	>.10	0.05	0.01	0.02	>.10	>.10	>.10	>.10	0.01

* 1. Males Pre-Test

2. Females Pre-test

3. Males Post-Test

4. Females Post-test

5. Males Follow-up

6. Females Follow-up